



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/563,745	08/29/2006	Christopher John Lawson	VOS0049/US	5383
33072	7590	04/28/2009	EXAMINER	
KAGAN BINDER, PLLC			SCHMIDTMANN, BAHAR	
SUITE 200, MAPLE ISLAND BUILDING				
221 MAIN STREET NORTH			ART UNIT	PAPER NUMBER
STILLWATER, MN 55082			4131	
			MAIL DATE	DELIVERY MODE
			04/28/2009	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>
	10/563,745	LAWSON ET AL.
	<b>Examiner</b>	<b>Art Unit</b>
	BAHAR SCHMIDTMANN	4131

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 06 January 2006.

2a) This action is **FINAL**.                            2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 1-27 is/are pending in the application.

4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5) Claim(s) \_\_\_\_\_ is/are allowed.

6) Claim(s) \_\_\_\_\_ is/are rejected.

7) Claim(s) \_\_\_\_\_ is/are objected to.

8) Claim(s) 1-27 are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All    b) Some \* c) None of:

1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) Notice of References Cited (PTO-892)

2) Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.

4) Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.

5) Notice of Informal Patent Application

6) Other: \_\_\_\_\_.

## **DETAILED ACTION**

This Office Action details a Restriction Requirement due to a Lack of Unity, and **Six** Election of Species Requirements.

### ***Status of Claims/Priority***

1. Claims 1-27 are pending in the current application. This application is a 35 U.S.C. § 371 National Stage Filing of International Application No. PCT/EP04/07538, filed 8 July 2004.

### ***Unity of Invention***

2. A group of inventions is considered linked to form a single general inventive concept where there is a technical relationship among the inventions that involves at least one common or corresponding special technical feature. The expression special technical features is defined as meaning those technical features that define the contribution which each claimed invention, considered as a whole, makes over the prior art. For example, a corresponding technical feature is exemplified by a key defined by certain claimed structural characteristics which correspond to the claimed features of a lock to be used with the claimed key.

A process is “specially adapted” for the manufacture of a product if the claimed process inherently produces the claimed product with the technical relationship being present between the claimed process and the claimed product. The expression

“specially adapted” does not imply that the product could not also be manufactured by a different process.

As set forth in Rule 13.1 of the Patent Cooperation Treaty (PCT), the international application shaft relate to one invention only or to a group of inventions. Moreover, as stated in PCT Rule 13.2, the requirement of unity of invention referred to in PCT Rule 13.1 shall be fulfilled where a group of inventions is claimed in one and the same international application only when there is a technical relationship among those inventions involving one or more of the same or corresponding special technical features. The expression special technical features shall mean those technical features that define a contribution which each of the claimed inventions, considered as a whole, makes over the prior art, so linked, as to form a general inventive concept.

The determination whether a group of inventions is so linked as to form a single general inventive concept shall be made without regard to whether the inventions are claimed in separate claims or as alternatives within a single claim. See 37 CFR 1.475(e).

**When Claims Are Directed to Multiple Categories of Inventions:** As provided in 37 CFR 1.475(b), a national stage application containing claims to different categories of invention will be considered to have unity of invention if the claims are drawn only to one of the following combinations of categories:

- (1) A product and a process specially adapted for the manufacture of said product; or (2) A product and process of use of said product; or (3) A product, a process specially adapted for the manufacture of the said product, and a use of the said

product; or (4) A process and an apparatus or means specifically designed for carrying out the said process; or (5) A product, a process specially adapted for the manufacture of the said product, and an apparatus or means specifically designed for carrying out the said process. Otherwise, unity of invention might not be present. See 37 CFR 1.475(c).

***Restriction Requirement***

3. Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

- I. Claim(s) 1-24, drawn to a method for preparing a compound of the general formula (I), a steroid modified solatriose of general formula (I) and a compound of general formula (XVII).
- II. Claim(s) 25, drawn to a compound of general formula (XV).
- III. Claim(s) 26, drawn to a compound of general formula (X).
- IV. Claim(s) 27, drawn to a compound of general formula (XII).

4. The inventions listed as Groups I-IV do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding technical features for the following reasons: Claim 1 recites a method for preparing a steroid modified solatrios of general formula (I), which comprises the step of reacting a compound of general formula (XIII) with a compound of general formula (XIV)

to yield a compound of general formula (XV). Claim 25 recites a compound of general formula (XV) which is not present in claim 1. There is no common technical feature *a priori* between claims 1-24 and 25-27.

5. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

### ***Rejoinder***

6. The examiner has required restriction between product and process claims. Where applicant elects claims directed to the product, and the product claims are subsequently found allowable, withdrawn process claims that depend from or otherwise require all the limitations of the allowable product claim will be considered for rejoinder. All claims directed to a nonelected process invention must require all the limitations of an allowable product claim for that process invention to be rejoined.

In the event of rejoinder, the requirement for restriction between the product claims and the rejoined process claims will be withdrawn, and the rejoined process claims will be fully examined for patentability in accordance with 37 CFR 1.104. Thus, to be allowable, the rejoined claims must meet all criteria for patentability including the requirements of 35 U.S.C. 101, 102, 103 and 112. Until all claims to the elected product are found allowable, an otherwise proper restriction requirement between product

claims and process claims may be maintained. Withdrawn process claims that are not commensurate in scope with an allowable product claim will not be rejoined. See MPEP § 821.04(b). Additionally, in order to retain the right to rejoinder in accordance with the above policy, applicant is advised that the process claims should be amended during prosecution to require the limitations of the product claims. **Failure to do so may result in a loss of the right to rejoinder.** Further, note that the prohibition against double patenting rejections of 35 U.S.C. 121 does not apply where the restriction requirement is withdrawn by the examiner before the patent issues. See MPEP § 804.01.

***Election of Species Requirement***

7. This application contains claims directed to more than one species of the generic invention. These species are deemed to lack unity of invention because they are not so linked as to form a single general inventive concept under PCT Rule 13.1.

If Applicant elects the invention of Group I, then Applicant is further required to elect from the following **First** through **Sixth** Election of Species Requirements.

If Applicant elects the invention of Group II, then Applicant is further required to elect from the following **Second** Election of Species Requirements.

If Applicant elects the invention of Group III, then Applicant is further required to elect from the following **First** and **Second** Election of Species Requirements.

If Applicant elects the invention of Group IV, then Applicant is further required to elect from the following **First**, **Second**, and **Fourth** Election of Species Requirement.

This application contains claims directed to the following patentably distinct methods for preparing a compound of general formula I comprising a **First** species of a compound of general formula III, a **Second** species of a compound of general formula VI, a **Third** species of a compound of general formula VII, a **Fourth** species of a compound of general formula XI, a **Fifth** species of a compound of general formula XVI, a **Sixth** species of a non-nucleophilic base. The species are independent or distinct because claims to the different species recite the mutually exclusive characteristics of such species. In addition, these species are not obvious variants of each other based on the current record.

Examples of **First** species of a compound of general formula III:

- 1a) wherein R<sup>5</sup> is a straight C<sub>1-14</sub> alkyl group, as disclosed in claim 3, and
- 1b) wherein R<sup>5</sup> is a branched C<sub>1-14</sub> alkyl group, as disclosed in claim 3, and
- 1c) wherein R<sup>5</sup> is a phenyl group, as disclosed in claim 3.

Examples of **Second** species of a compound of general formula VI:

- 2a) wherein R<sup>6</sup> is pivolyl, as disclosed in claim 5, and
- 2b) wherein R<sup>6</sup> is alkyl substituted benzoyl, as disclosed in claim 5.

Examples of **Third** species of a compound of general formula VII:

- 3a) wherein R<sup>7</sup> is benzylidene, as disclosed in claim 6, and
- 3b) wherein R<sup>7</sup> is 4-methoxybenzylidene, as disclosed in claim 6.

Examples of **Fourth** species of a compound of general formula XI:

- 4a) wherein R<sup>10</sup> is a halogen atom, as disclosed in claim 10, and
- 4b) wherein R<sup>10</sup> is a trichloroacetimidate, as disclosed in claim 10

Examples of **Fifth** species of a compound of general formula XVI:

- 5a) wherein R<sup>2</sup> is a straight C<sub>1-4</sub> alkyl group, R<sup>4</sup> is a benzoyl, and R<sup>10</sup> is a halogen atom, as disclosed in claim 12.

Examples of a **Sixth** species of a non-nucleophilic base:

- 6a) 2,6-lutidine, as disclosed in claim 22, and
- 6b) 2,4,6-collidine, as disclosed in claim 22.

Applicant is required, in reply to this action, to elect a single species to which the claims shall be restricted if no generic claim is finally held to be allowable. The reply must also identify the claims readable on the elected species, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered non-responsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims

are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

All claims reciting any of the above noted species are considered to be generic.

### ***Conclusion***

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mrs. Bahar Schmidtmann whose telephone number is (571)270-1326. The examiner can normally be reached on Mon-Fri 9:00am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. James O. Wilson can be reached on (571)272-0661. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Bahar Schmidtmann/  
Patent Examiner, Art Unit 4131

**/James O. Wilson/  
Supervisory Patent Examiner, Art Unit 1624**